

Math Out of the Box® Third Grade Set

Math Out of the Box® is based on the latest research about how children learn. A team of teachers, directed by specialists in math and science reform, worked together to develop, field-test, revise, and complete the highest-quality lessons and materials based on the NCTM Principles and Standards for School Mathematics. Each Algebra, Geometry, and Measurement module offers 20 classroom-tested lessons, for approximately 4-6 weeks of instruction. Number Concepts modules are separated into 2 units with 2 manuals that both provide 20-30 classroom-tested lessons, each for approximately 9 weeks of instruction. All modules are developed around a central mathematical theme, materials provided equip one class of 30 students, and is correlated to Kentucky's Program of Studies.

Contract Price

\$3,629.80

Grade

3

TYPE

P2

Copyright

2009

Author

Clemson University

Edition

1st

Content

Mathematics

ReadabilityAccessibility

Nimas MathML

Research

<http://www.mathoutofthebox.org/research/researchbase.shtml>

Teacher Edition

9781435001831	\$189.95
Developing Algebraic Thinking: Plotting and Growing Teacher's Guide	
9781435001954	\$189.95
Developing Geometric Logic: Shapes and Paths Teacher's Guide	
9781435002074	\$189.95
Developing Measurement Benchmarks: Scales and Balances Teacher's Guide	
9781435001367	\$209.95
Developing Number Concepts: Ordering and Arranging Teacher's Guide (A)	
9781435001398	\$189.95
Developing Number Concepts: Ordering and Arranging Teacher's Guide (B)	

Essential Items

9780892784479	Nimas MathML	\$780.95
Developing Algebraic Thinking: Plotting and Growing Module		
9780892784653	Nimas MathML	\$810.95
Developing Geometric Logic: Shapes and Paths Module		
9780892784769	Nimas MathML	\$1,001.95
Developing Measurement Benchmarks: Scales and Balances Module		
9781435001404	Nimas MathML	\$1,035.95
Developing Number Concepts: Ordering and Arranging Module (A/B)		

Ancillary Items

Calculator Set A	\$139.95
9781435003293	\$235.00
Math Matters® en español and Math Matters® Spanish/English Set	
9781435003286	\$50.00
Math Matters® Geometry, Data, Graphing, and Probability Set	
9781435003279	\$71.00
Math Matters® Numbers, Number Sense, and Operations	
9781435003262	\$71.00
Math Matters® Time, Money and Measurement Set	

Free with Purchase items

Premium Content

<http://www.carolinacurriculum.com/login.asp>

Evaluation Tool for Basal Instructional Materials
Mathematics (2009 – 2015)

Provided by the Publisher	ISBN 9781435003200		Publisher - Carolina Curriculum Publishing	
	Math Out of the Box® Third Grade Set			
	Type - P2	Author - Clemson University		
	Copyright - 2009	Edition - 1st	Readability -	
	Course - Mathematics		Grade(s) - 3	
Teacher Edition ISBN if applicable 9781435001831				

Overall Recommendation:

Recommended as BASAL

Overall Strengths, Weaknesses, Comments:

if this box is not checked, the evaluators have
chosen NOT recommend as basal

This set of materials encourages student involvement with mathematic concepts through a hands-on approach. Inviting materials are part of this set. However, there are serious limitations to the set as a whole. Lack of media and technology can seriously limit the use of this program in current and future classrooms. Also, many skills are taught in isolation (although real-life activities are used) and repetition is not considered in most areas. The manipulatives are user friendly, but there are very limited resources for extension and diversity.

NIMAC Accessibility	NML	
Ancillary	Yes	
Free with Purchase	Yes	
Research	Yes	http://www.mathoutofthebox.org/research/researchbase.shtml

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CRITERIA

This basal resource ...

A. Encompasses KY Content Standards & Grade Level Expectations

Moderate Evidence

Text is designed to be used in an elective course outside the Program of Studies

1) Includes the 5 Big Ideas of mathematics to the following extent:

- | | |
|--|-------------------|
| a) Number Properties and Operations | Strong Evidence |
| b) Measurement | Moderate Evidence |
| c) Geometry | Moderate Evidence |

d) Data Analysis and Probability	Moderate Evidence
e) Algebraic Thinking	Strong Evidence
2) Addresses content-specific enduring understandings from the related Program of Studies standards.	Moderate Evidence
3) Addresses content-specific skills and concepts from the related Program of Studies standards.	Moderate Evidence
4) Content addressed is current, relevant and non-trivial	Strong Evidence
5) Provides opportunities for critical thinking/reasoning	Strong Evidence

6) Strengths, Weaknesses, Comments:

- Specific strengths-which areas/concepts are covered exceptionally well?
- Specific weaknesses-which areas/concepts would likely require supplementing?

Many concepts are presented in isolation and not revisited throughout . Additionally, there is a limitation on the amount of practice that is provided. Much attention is paid to the hands-on, manipulative approach and the traditional pen and paper approach does not receive as much focus. For example, geometry is addressed but the activities are limited to a few lessons. There is not ample opportunity for follow-up and practice.

B. Functionality & Suitability

Moderate Evidence

1) Suitability

Moderate Evidence

- Should be suitable for use with a diverse population and is free of bias regarding race, age, ethnicity, gender, religion, social and/or geographic environment; is free of stereotyping or bias of any kind.

2) Content quality

Little or No Evidence

- Free from factual errors
- Content is presented conceptually when possible—more than a mere collection of facts
- Content included accurately represents the knowledge base of the discipline
- Theories/scientific models contained represent a broad consensus of the scientific community
- Interconnections among mathematical topics

3) Connections to Literacy

Moderate Evidence

- Employs a variety of reading levels and is grade/level appropriate
- Use of multiple representations-concrete, visual/spatial, graphs, charts, etc.
- Provides opportunities for summarizing, reviewing, and reinforcing vocabulary skills and concepts at multiple levels of difficulty for a variety of learning styles.
- Student text provides opportunity to integrate reading and writing
- Uses vocabulary that is age and content appropriate
- Focuses on critical vocabulary vs. extensive lists
- Identifies key vocabulary through definitions in both text and glossary
- The text is engaging and facilitates learning
- Embedded activities enhance the understanding of the text

Note: may apply to either student or teacher editions

4) Connections to Technology **Little or No Evidence**

- Integrates technology and reflects the impact of technological advances
- Uses technology in the collection and/or manipulation of authentic data
- Embeds web links as a mathematics resource.

5) Support for Diverse Learners **Little or No Evidence**

- Provides support for ESL students
- Provides support for differentiation of instruction in diverse classrooms
- Challenge for gifted and talented students
- Support for students with learning difficulties

Note: may apply to either student or teacher editions

6) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

The information states that the lessons use technology as a problem solving tool; however, no particular websites or media tools are provided. No CDs or suggestions for use of technology (other than the manipulatives) are provided. This is a serious weakness of this material. Additionally, diverse learners are mentioned and certainly may be addressed in the hands-on approach; however, no additional research or materials are offered.

C. Supports Inquiry and Skill Development

Moderate Evidence

1) Promotes Inquiry, research and Application of Learning **Moderate Evidence**

- Provides opportunities for inquiry and research that includes activities such as gathering information, researching resources, observing, interviewing, and evaluating information, analyzing and synthesizing data and communicating findings and conclusions, formulating authentic questions to deepen and extend mathematical reasoning.
- Requires students to use higher-level cognitive skills (analysis, synthesis, evaluation, generalizing, justifying, etc.)
- Provides activities and projects for students to deepen their knowledge and cultivate and strengthen problem-solving and decision-making skills.
- Provides opportunities for application of learned concepts.
- Uses a variety of relevant charts, graphs, diagrams, number lines, and other illustrations to invite and motivate students to engage in discussion, problem solving, and other high-order thinking skills.
- Emphasizes conceptual understandings that invite students to predict, conclude, evaluate, develop and extend ideas to support reasoning.

Note: may apply to either teacher or student edition

2) Skill Development **Moderate Evidence**

- Provides opportunities to make sense of all mathematics
- Provides opportunities to recognize, create, and extend patterns.
- Provides opportunities for critical thinking and reasoning.
- Provides opportunities to justify/prove responses.

Evaluation Tool for Basal Instructional Materials
Mathematics (2009 – 2015)

- Provides opportunities to ask deeper questions.
- Contains embedded activities (or extensions) that emphasize use of technology for problem solving

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

There is limited variety of use of graphs in relation to what is expected in Kentucky's Program of Studies for this grade.

D. Supports Best Practices of Teaching and Learning

Moderate Evidence

1) Engages Students

Moderate Evidence

- Includes content geared to the needs, interests, and abilities of all students
- Engages and motivates students using components such as real-life situations, simulations, experiments, and data gathering.
- Includes information and activities that assist students in seeing relevance of concepts (where appropriate) to their own lives and experiences
- Provides a variety of strategies, activities, and materials to enhance student learning at the appropriate learning levels
- Activities are truly congruent to the concepts addressed, not merely correlated

Note: may apply to either teacher or student edition

2) Uses Assessment to Inform Instruction

Moderate Evidence

- Includes multiple means of assessment as an integral part of instruction
- Provides evaluation measures in the teacher edition that supports differentiated learning activities
- Embedded assessments reflect a variety of Depth of Knowledge levels

Note: may apply to either teacher or student edition

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards

Assessments are listed but various means of collecting data for student progress are not provided. The student record book is the one of few tangible materials given for written record (mastery lists are also included for teacher records, but nothing to collect student evidence).

E. Has an Organization/ Format that Supports Learning and Teaching

Moderate Evidence

1) Organizational Quality

Little or No Evidence

- Print and/or electronic materials present minimal barriers to learners, but also add encouragement for students to stretch and make further explorations.
- Presents chapters/lessons in an organized and logical sequence
- Provides clearly stated objectives for each lesson.
- Uses text features (e.g., titles, headings, subheadings, review questions, goals, objectives, space, print, type size, color) to enhance readability.
- Makes use of various forms of media (e.g., CD's, recordings, videos, cassette tapes, computer

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software, web-based components, interactive software, calculators, physical and virtual manipulatives) as either student or teacher resources

- Includes clear, accurate, appropriate and clearly explained illustrations and/or graphics that reinforce content standards.
- Incorporates a glossary, footnotes, recordings, pictures, and/or tests that aid pupils and teachers in using the book effectively
- Uses grade-appropriate type size
- Included media are durable, easy to use and have technical merit
- Construction appears to be durable and able to withstand normal use

2) Essential Components (beyond student and teacher text) Strong Evidence

- Items identified as essential components support the learning goals and concept coverage of the basal

3) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

Limited print, student resources; workbook is not very engaging; teaching books do not seem of quality for durability; no glossary for students; limited or no illustrations

F. Has available Ancillary/ Gratis Materials

Note: The decision whether to recommend or not recommend this resource as a basal should not be influenced by Section F **Moderate Evidence**

1) Ancillary/Gratis Materials

- Coordinates teacher resources easily with student material (e.g., accompaniments included, student pages shown, instructional technology indicated).
- Are well-organized and easy to use
- Provide substantive learning opportunities and are congruent with student learning goals
- Provide opportunities for high-level thinking, assessment, and/or problem solving
- Provides opportunities for intervention.

2) Strengths, Weaknesses, Comments:

- Reviewers may provide page numbers to point out specific strong examples for individual evaluation standards.

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